

Environmental Performance and Business Success – The Electrolux Experience

Jonathan B. Shopley and Howard B. Ross

„Environmental protection is a question of long-term survival for individuals, companies, and society. Activities must be adapted to nature’s own limitations in terms of resource use and pollution. Environmental care must be a cornerstone in our operations and must characterize our daily work.“

Leif Johansson President and CEO Electrolux

Though some may debate it, real progress has been made over the past two decades in how companies around the world manage operations to minimize environmental impact and to clean up past mistakes. In the United States, regulations and the threat of legal action have been primary motivators for improved environmental performance. In Europe, market forces and competition have yielded progressive results that make interesting comparison to those from the United States. When we look at what drives European companies to launch environmental initiatives, we find competitive and strategic concerns shaping key decisions.

The Electrolux Group, based in Sweden, is a global appliance company that is working actively to integrate environmental issues into key business processes in order to meet – and in some instances exceed – customer expectations. Electrolux is a world leader in the manufacture of a wide range of appliances, such as white goods, vacuum cleaners, outdoor and gardening equipment, and commercial equipment for food service, refrigeration, and industrial laundering. With 112,000 employees around the world Electrolux had 1995 revenues of about \$17 billion U.S., with over 90 percent of sales outside Sweden. It operates subsidiaries in 60 countries and sells products in more than 90. In the United States, for example, Electrolux operates under brand names that include Frigidaire, Eureka, Poulan, and Weed Eater.

Top management at Electrolux is convinced that embracing environmental imperatives is a strategic issue that can create competitive advantage and improve profitability. The challenge of this strategic environmental focus fits well with the company’s engineering and product-innovation tradition, since progress toward ecologically sustainable development requires innovation and the development of new products and business concepts.

Stepping Up to the Environment

Like many companies back in the mid-1980s, Electrolux found itself unprepared for growing public concern about chlorofluorocarbons (CFCs) or for the subsequent phase-out of these substances in refrigerator appliances. The firm’s attitude toward this concern, initially reactive and defensive, evolved rapidly. By 1989, the company, along with all other manufacturers, reduced the use of CFCs. Three years later, when Greenpeace dumped a truckload of old refrigerators at the entrance to Electrolux’s headquarters, Electrolux had already developed and was about to launch a range of refrigerators without CFCs or HCFCs.

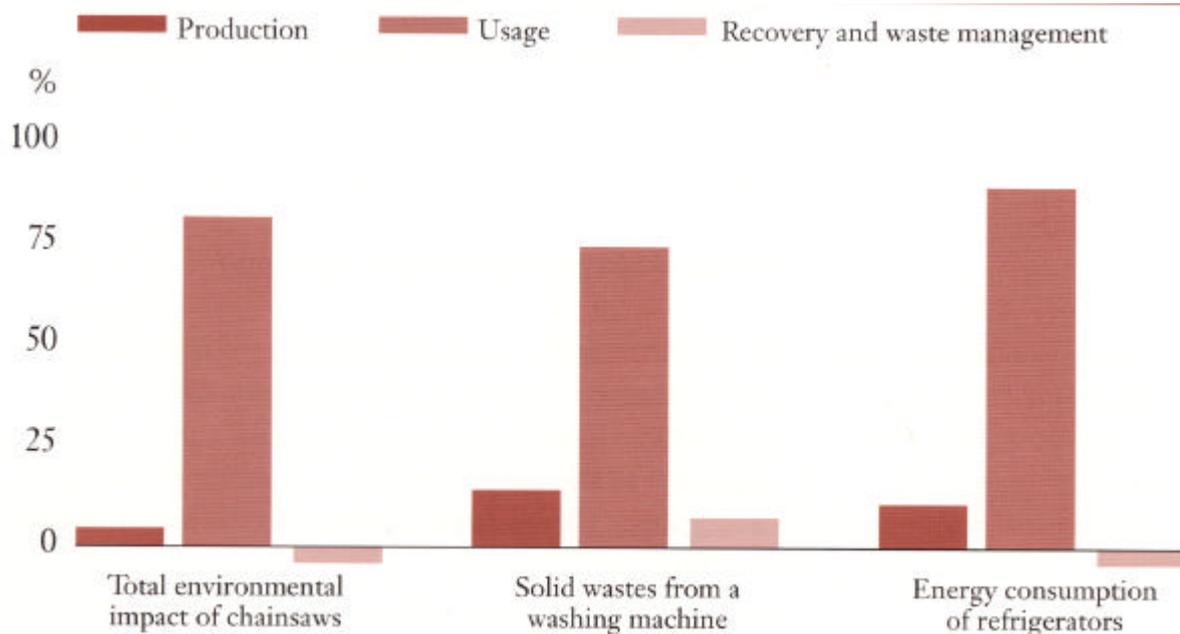
The worldwide media attention on the CFC issue caused Electrolux’s top management to consider environmental issues a potentially strategic imperative. Management set out to understand not only the CFC issue but also all other important areas of environmental concern that could have an impact on their business. Taking a life cycle approach, Electrolux found less cause for concern about potential environmental problems related to their factories and operations than about potential issues related to the products’ „usage“ phase, which relies heavily on the consumption of energy, water, and chemicals such as lubricants and laundry and dishwashing detergents (Exhibit 1).

This strategic exercise had another important result. Several members of the top management group came to believe that Electrolux had a responsibility to reduce the environmental impact of products and operations, whether or not legal requirements demanded they do so. As envisioned in the Electrolux change process, these leaders moved from a situation of knowledge about the issues to a deeper understanding of their potential threat both to the environment and to the business health of the company itself; with this insight came the ability to see new business opportunities.

This change in „mental models“ is exemplified by the decision of the Electrolux Group to move directly from „hard“ CFCs as refrigerant coolants to hydrocarbons such as butane, skipping the transitional use of „soft“ freons, which much of the industry was turning to at the time. While this strategy took the long-term view, it also forced some other European competitors into a defensive position. Electrolux gained a leading position in the market. The accelerated competitive pressure led to the abandonment of ozone-depleting substances in refrigerators across Europe in just half the time required by legislation. Most importantly, it set a new standard for the marketplace: in several countries, including Germany, Sweden, Holland, and Switzerland, it became essentially impossible to sell refrigerators that contained any type of CFCs.

Exhibit 1

Environmental Impact Is Greatest When the Product Is Used



Source: Electrolux

Integration Into Business Strategy

At Electrolux, the strategic platform for integrating environmental issues into business processes is the company's vision and values. For them, a proactive approach to the environment is a necessary business prerogative. Electrolux's approach to the environment has three cornerstones:

- Life cycle approach – the value-added chain starts with raw materials and concludes with product usage and recycling
- Integration – synchronizing and integrating environmental activities with business processes
- Measurement of environmental performance – activities are measured by systems that take into account the entire value-adding chain, capturing both environmental effects and business results

Life Cycle Approach. Electrolux estimates that between 80 and 90 percent of the environmental impact of its products during their life cycle occurs as they are being used, rather than during the manufacturing or disposal phases. For that reason, the company sees its „total approach“ as the best path to achieving its vision. The total approach encompasses the product life cycle, from raw materials processing and refinement to usage and recovery. This process begins with suppliers and continues through the entire value-adding process, including wastes and emissions (Exhibit 2). The total approach also means that environmental questions are not managed in a separate corporate function by a few environmental experts. Rather, the company is committed to integrating the environment into management strategy and into the myriad decisions that Electrolux employees make every day affecting the total life cycle of their products.

Integration. In 1995, Electrolux committed to ISO 14001 as the environmental management system to institute into all of its 150 facilities before the year 2000. The company's goal is to fully integrate ISO into the business strategy process so as to drive innovation in making its operations, products, marketing, sales, and strategic planning more sustainable. In addition, Electrolux deals with environmental questions within the framework of its Integrated Product Development Process (IPDP). IPDP provides product developers with tools to incorporate environmental factors into their work systematically. Among other things, developers receive support for project specifications and target formulation, design handbooks, checklists, and control points for various phases in the development project. Electrolux distinguishes among three levels of innovation (Exhibit 3):

- Continued improvements to existing products by fine-tuning existing technologies and materials. Improvements may mean, for example, improved energy performance, reduced water consumption, or reductions in exhausts.¹

- Introduction of new technologies for improving existing products. Examples include electronics and sensors for control of processes in products, Direct Spray for water control in washing machines, vacuum technology for refrigerator insulation panels, and catalysts for two-stroke engines.
- Conceptual changes that redefine products. Here, product developers can make the most significant environmental changes. Examples include the automatic solar-driven lawn mower and the system that replaces traditional dry cleaning with water-based cleaning. These new technologies will set new standards in years to come.

Exhibit 2

Electrolux and the Environment:

Total Approach Based on the Life Cycle Philosophy

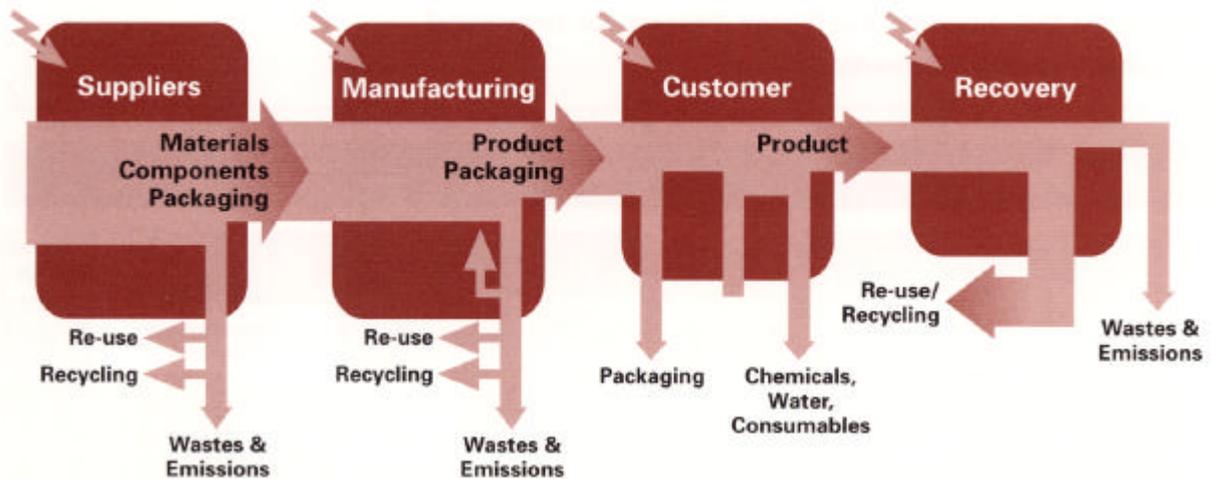


Exhibit 3

Product Development in Three Stages for Improved Environmental Performance

Step-by-Step Improvements	New Technology	New Concepts
		Solar-Powered Lawnmowers
		Aquaclean by Wascator
		Electrical Gardening Equipment
		Catalytic Technology
		Rack-Type Dishwashers
		Absorption Refrigerators
		Washing Machines Using 40 Liters of Water
		Low-Energy Refrigerators
		Dishwashers Using 15 Liters of Water

Source: Electrolux

Electrolux's 20 product lines have various preconditions that affect their business operations and thus the way they control environmental issues. Management introduced the Environmental Change Program (ECP) to simplify the identification and control of environmental threats and opportunities in the long and short term. ECP allows managers to map current environmental situations, understand future demands, and prepare for such situations, whether driven by public opinion, regulators, or business rationale. Scenarios are used to generate new ideas and focus on opportunities where a market is moving toward sustainable development. In conjunction with ECP, management is currently developing new procedures for integrating strategy development for the various product lines. In the future, environmental plans will be integrated across the products; there will no longer be separate reporting.

Electrolux avoided the „green marketing“ thrust of the 1980s, choosing instead to take a deeper and longer-term approach to integrating environmental issues into business processes. This route holds much greater promise of sustained advantage from lower costs and increased revenues. For example, the company is piloting several studies in which it is selling functionality rather than physical products. The Euroclean division, which has traditionally developed, manufactured, and sold commercial floor cleaning products, is developing a business strategy of offering the customer the cleaning capacity. This capacity, guaranteed in terms of function and quality, is paid for on a monthly basis. Electrolux Euroclean remains the owner of the equipment, and the company's role switches from manufacturing to the service sector.

Why move in this direction? For two main reasons: First, it enables Electrolux to retain tighter control of its proprietary technology, thereby giving the company a competitive edge at a time when innovative modular products using less material and parts will create market advantage. Second, Electrolux can stay at the forefront in meeting product take-back and recycling demands, soon to be legislated in many European (and other) countries. While this change may be essential for the future health of the company, it shows how concern for the environment can be a motor of change in an organization. To achieve a successful business based on function, Electrolux, which is traditionally strong in manufacturing, will need to acquire new skills in marketing and selling services.

Measurement of Performance. Enlightened companies are linking environmental performance to strategic and other performance indicators for the business as a whole and for individual product lines or subsidiaries. But companies seeking to truly measure the impact of their operations and products on the environment face stiff challenges. For example, most of the present-day environmental measures do not measure product performance over a lifetime of 10 to 20 years. Moreover, environmental issues can be extremely complex and difficult to separate from product performance. A good example is a dishwasher that cleans dishes better and uses only 15 liters of water instead of 45 liters. One effective way to overcome these measurement issues is to focus on true business measures, with environmental measurement designed in as part of these. The environmental „measures“ can range from a factory's energy costs to the goodwill generated from development of an effective lawn-mower that is solar powered.

The measures that Electrolux uses to monitor success in meeting targets are the logical result of the company's holistic approach to environmental management as part of the business process. In short, the company has developed three product-related measuring tools that are linked to its economic progress:

- The share of leading environmentally sound products
- Product improvements from year to year
- Practical recycling possibilities

Recognizing the direct link between the company's environmental strategy and financial results, Electrolux management defines two ways to create value. The first is gross profit and net sales, which hinges on the value of products to customers as well as on reduced costs because of improved process efficiency. The other is corporate goodwill and brand value, assets that show up on the balance sheet.

One Strategy Worldwide

Electrolux is a decentralized global company built through rapid expansion and acquisition. The result is a complex corporate structure in countries with unique cultures, legal systems, and environmental infrastructures. Even within the company itself, approaches to specific environmental issues may vary from country to country or by subsidiary. Nonetheless, the company's overall corporate environmental strategy drives the direction for each decision made. That strategy comprises two imperatives:

- To be a leader in environmentally sound technology, products, and processes
- To actively develop demand for the use of environmentally sound products

In the words of Per Grunewald, Senior Vice President of Environmental Affairs at Electrolux, „The ultimate purpose of our proactive Environmental Strategy is to create shareholder value based on sustainable competitive advantages, responding to growing awareness and expectations among our customers.“ This kind of goal is more typical in European companies than in companies in other parts of the world. In North America, while companies such as Dow Chemical, Baxter International, Northern Telecom, and Xerox have also been moving in this direction, a more common approach is to focus on meeting and exceeding compliance expectations.

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¹*Examples of continuous improvement are: a 40 times reduction in energy consumption for refrigerators since the 1950s; reduction of nitrous oxide emissions by 70 percent and hydrocarbons by 80 percent from two-stroke engines.*

Howard B. Ross leads Arthur D. Little's Environmental, Health, and Safety Practice in Scandinavia. An expert in environmental science and management, he assists multinational clients with the development and implementation of environmental management systems and business strategies.

Jonathan B. Shopley is a Vice President of Arthur D. Little International and a Managing Director in its Environmental, Health, and Safety Consulting business, based in Brussels. He specializes in technical, policy, and strategic planning and direction.